

To: Black, Ned[Black.Ned@epa.gov]; Rauscher, Jon[Rauscher.Jon@epa.gov]; Wall, Dan[wall.dan@epa.gov]; OBrien, Wendy[OBrien.Wendy@epa.gov]; Keteles, Kristen[Keteles.Kristen@epa.gov]; Hiatt, Gerald[Hiatt.Gerald@epa.gov]
Cc: Allen, HarryL[Allen.HarryL@epa.gov]; Valdes, Dennisses[Valdes.Dennisses@epa.gov]; McKean, Deborah[mckean.deborah@epa.gov]
From: Greenberg, Marc
Sent: Mon 8/10/2015 10:14:02 PM
Subject: RE: MASS BALANCE QUESTION

Very good. The Region 6 EUL plans to reach out to Terrence Johnson for this support. Thanks.

From: Black, Ned
Sent: Monday, August 10, 2015 3:18 PM
To: Greenberg, Marc; Rauscher, Jon; Wall, Dan; OBrien, Wendy; Keteles, Kristen; Hiatt, Gerald
Cc: Allen, HarryL; Valdes, Dennisses; McKean, Deborah
Subject: RE: MASS BALANCE QUESTION

Marc,

After the regular EU call we had a follow-up with just Jon Rauscher, Phil Turner, Gerry Hiatt and me. We decided to cut a 213 asking ERT to do this mass balance.

Jon or Phil are taking care of that.

Cheers,

ned

ned black, ph.d.

us epa r9

regional cercla ecologist

415-972-3055

Please be advised I currently have limited access to email when I am not in the office (e.g., on

travel), therefore please be patient with any communication delays.

From: Greenberg, Marc
Sent: Monday, August 10, 2015 11:19 AM
To: Rauscher, Jon; Wall, Dan; OBrien, Wendy; Keteles, Kristen; Black, Ned; Hiatt, Gerald
Cc: Allen, HarryL; Valdes, Dennisses; McKean, Deborah
Subject: MASS BALANCE QUESTION

Folks,

I put a different subject line on the question I sent earlier today to perhaps bring it to your attention in case you did not get to it before your EU call earlier today.

From: Greenberg, Marc
Sent: Monday, August 10, 2015 11:23 AM
To: Rauscher, Jon; Wall, Dan; OBrien, Wendy; Keteles, Kristen; Black, Ned; Hiatt, Gerald
Cc: Allen, HarryL; Valdes, Dennisses; McKean, Deborah
Subject: RE: EOC Spot Report: Update #1, Region 8, Abandoned Mine Release into Animas River; San Juan County, CO

EU folks,

Harry Allen in R9 brought a good question about mass balance to my attention earlier today. Metals is one thing, but also pH, alkalinity, hardness and other WQ parameters. So, it might be wise to do some mass balances to show the estimated contributions to the stream other than color that is shown by a photograph. So the question is, has anyone been looking into a mass balance to enhance our understanding and expectations on what this spill of 30 M gal might mean? It might provide a way for us to contextualize the spill (from multiple perspectives: mass loading, exposure potential, and risk). Sounded like an EU question to me.

You may have people (contractor or in-house) that can do this for you as part of the response. If not, please contact myself or Dee Valdes for assistance.

Thanks,

Marc

Marc S. Greenberg, Ph.D.
Deputy Branch Chief
U.S. EPA - Environmental Response Team

OSWER/OSRTI/TIFSD/ERT

2890 Woodbridge Ave., Bldg. 205
Edison, NJ 08837
+ 732 452 6413 (office)

+ 609-865-3924 (mobile)

greenberg.marc@epa.gov